Between group comparisons (before, after, and change) were all non-significant except for Rx drugs ($19 higher for IBS+C, $P < 0.05$) and other ($8 higher for C, $P < 0.05$) in the after period as well as the change for Rx drugs ($16 higher for IBS+C, $P < 0.05$). Within groups, costs for Rx Drugs significantly increased in both cohorts and outpatient and ED significantly increased for the C cohort. **CONCLUSION:** Patients with constipation and IBS+C incur similar costs throughout the health care system.

PGI12

HEALTH CARE COSTS RELATED TO THE TREATMENT OF CROHN'S DISEASE

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OBJECTIVE: To estimate differences in health care costs between Crohn's disease (CD) patients and controls and to examine differences in CD costs by prescription therapy. **METHODS:** Administrative claims data from geographically diverse private US health plans with service dates between January 1, 2002 and December 31, 2005 were utilized. CD patients (ICD-9-CM code 555.x) were identified and matched to controls in a 1:5 ratio on age, gender, health plan, and duration of enrollment. Two part models (logistic regression for likelihood to incur any costs and log-transformed regression for costs) were used to estimate costs (amounts paid by health plans for medical services and pharmaceuticals), controlling for socio-demographic characteristics and medical co-morbidities. CD patients were grouped by drug regimen as follows: steroids, immunosuppressants, infliximab, any combination of the three drug classes, and no regimen or regimens not including the three studied drug classes. Average per patient per day medical and pharmaceutical cost was estimated for each group and projected annually. **RESULTS:** A total of 9,302 CD patients and 46,510 matched controls were identified. The mean age in each group was 46.9 and 55.8% were females. Annual total predicted costs per patient were over 3 times higher in the CD group ($11,569) than the control group ($3,564, $p < 0.01$). Medical and pharmacy costs were the lowest in the group receiving no regimen/regimens not including studied classes. Medical costs were at least 50% higher in patients receiving combination therapy that included steroids than those receiving combinations not including steroids. **CONCLUSION:** CD patients incur significantly greater costs than matched controls. CD patients on no regimen/regimens not studied incur few costs suggesting that they may be experiencing remission or mild symptoms. Steroids are associated with significantly higher medical costs, which may be suggestive of uncontrolled symptoms or flares requiring medical resources.

PGI13

DIRECT ECONOMIC BURDEN OF CHRONIC HEPATITIS C VIRUS IN A LARGE MANAGED CARE POPULATION

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OBJECTIVE: Hepatitis C virus (HCV) is one of the most common blood-borne infections in the US. The cost burden of HCV to third party payers has not been widely investigated using administrative data. We analyzed retrospective insurance claims to estimate total, all-cause resource utilization and costs among managed care enrollees with chronic HCV compared to similar subjects without HCV. **METHODS:** A large US claims database was analyzed from January 1, 2002 through December 31, 2006. Inclusion criteria were: ≥1 diagnosis of chronic HCV (ICD-9 070.44, 070.54, 070.70, or 070.71); no evidence of hepatitis B; ≥12 months of continuous plan enrollment post-diagnosis. Per patient use and costs of all medical services and prescription drugs utilized over a 12-month period post-diagnosis were evaluated. Outcomes were also assessed in controls without HCV matched (1:1) on age, gender, and length of plan enrollment. **RESULTS:** A total of 20,662 patients met all inclusion criteria. Mean age was 49 years and 61% were male. Total costs were $20,830 per HCV patient, compared to $4673 per control ($P < 0.0001$). Hospitalization was seen in 24% of HCV patients compared to 7% of controls ($P < 0.0001$), with mean inpatient costs of $5765 and $1031 per patient, respectively ($P < 0.0001$). Patients with HCV had significantly higher ($P < 0.0001$) prescription costs compared to controls ($6178 vs. $1097), as well as increased use and costs of other medical services, including office visits (23 vs. 11 visits; $2112 vs. $1036), other ancillary services ($4800 vs. $1301), emergency care (32% vs. 14% with ≥1 admission; $387 vs. $114), and laboratory tests ($741 vs. $110). **CONCLUSION:** Costs incurred by payers for patients with HCV are more than four times the costs attributable to individuals without HCV. Pharmacy and inpatient services are drivers of these costs. Health plans should be aware of heightened costs for enrollees with HCV when considering formulary access for treatments.

PGI14

COST-EFFECTIVENESS OF PROTON PUMP INHIBITORS FOR PATIENTS WITH GASTROESOPHAGEAL REFLUX DISEASE: SHOULD EMERGING SAFETY CONCERNS AFFECT THERAPEUTIC DECISION-MAKING?

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OBJECTIVE: Studies have shown that continuous and on-demand use of proton pump inhibitors (PPI) are more efficacious and cost-effective strategies than continuous histamine-2 receptor antagonist (H2RA) use for maintenance therapy of gastroesophageal reflux disease (GERD). Recent research has raised questions about potential safety concerns of hip fractures and acute myocardial infarction (AMI) associated with long-term PPI use. This study integrates treatment efficacy with emerging safety data to compare the cost-effectiveness from the payer perspective of continuous PPI use, on-demand PPI use, and continuous H2RA use for maintenance therapy for GERD. **METHODS:** A Markov model was designed to simulate, over five years, the clinical and economic outcomes of GERD patients asymptomatic after initial acute treatment on maintenance therapy with PPIs or H2RA. The transition probabilities, costs, and utilities were derived from the peer-reviewed literature. Sensitivity analysis was conducted to examine the robustness of the model and to determine the thresholds at which safety issues may alter therapeutic decisions. **RESULTS:** In the base-case efficacy model, intermittent PPI treatment was the least costly and least effective strategy, whereas the step-down PPI strategy was most costly and most effective, with an incremental cost-effectiveness ratio (ICER) of $24,636 per quality-adjusted life-year (QALY), relative to the intermittent PPI strategy. The maintenance H2RA strategy was dominated throughout the sensitivity analysis. The results were consistent when hip fracture events were introduced into the model, with the step-down PPI strategy ICER increasing to $29,113/QALY. Threshold analysis for AMI showed the hypothesized relative risk (RR) would need to be 11.9 before maintenance H2RA therapy would be considered a cost-effective